

patients were biologic-experienced, and 52 (34%) were biologic-naïve before initiating golimumab. A higher percentage of female patients were in the bio-experienced category (70% vs. 55%). Osteoarthritis (27%), hypertension (24%), dyslipidemia (17%), and depressive disorders (14%) were the most common comorbidities prior to the start of golimumab. A higher rate of depressive disorder was observed in the biologic-experienced group. Baseline mean C-reactive protein test values were also higher in the biologic-experienced group (3.69 vs. 0.97). Biologic-experienced patients on golimumab were switched mostly from adalimumab (n=42) and etanercept (n=25). **CONCLUSIONS:** In this longitudinal EMR, patients receiving golimumab were more likely to have prior biologic experience. Biologic-experienced patients appeared to have higher C-reactive protein test values and greater rates of depressive disorders than their biologic-naïve counterparts.

PSY65

CHARACTERISTICS OF GOLIMUMAB UTILIZATION IN A LARGE NATIONAL PAYER DATABASE

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OBJECTIVES: Golimumab (GLM) is a monthly self-injected anti-tumor necrosis factor alpha therapy providing once-monthly dosing for patients with rheumatoid arthritis (RA), ankylosing spondylitis (AS), and psoriatic arthritis (PsA). This study assesses the baseline characteristics and utilization patterns of patients who received GLM. **METHODS:** We performed a retrospective database analysis of The MarketScan® Research Database from Thomson Reuters. This database contains individual-level, de-identified, healthcare claims information from employers, health plans, hospitals, Medicare, and Medicaid. A total of 29,774 patients in this database had a diagnosis of either RA, PsA or AS and at least one biologic on record and met the following inclusion criteria: ≥18 years of age at the time of the first diagnosis. From this sample, a total of 174 patients had at least one prescription record for GLM. **RESULTS:** A total of 174 patients receiving GLM were identified as meeting all the inclusion criteria; with 128 (RA), 30 (PSA), and 16 (AS). The mean age was 48 years and 75% of the sample was female. A total of 155 (89%) patients were bio-experienced and 19 (11%) were bio-naïve before initiating golimumab. A total of 111 patients received at least two GLM doses. Of the patients with two or more GLM doses, the median and mean ±SD dosing interval was 29.5 days and 33.65 ± 15.56 days. When looking at biologic naïve patients the median and mean ±SD dosing interval was 30 days and 35.37 ± 17.63 days versus biologic experienced patients with a dosing interval of 29 days and 33.15 ± 15.00 days. **CONCLUSIONS:** In the MarketScan database, the majority of patients with a prescription for GLM was female and had prior biologic experience. GLM median and mean doses were 29.5 and 33.37 days respectively. Previous biologics experience did not significantly change the GLM dosing patterns.

PSY66

BIOLOGIC EXPERIENCE AND DOSING OF GOLIMUMAB PATIENTS IN MANAGED CARE

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OBJECTIVES: Golimumab, a newer anti-tumor necrosis factor agent used in patients with rheumatoid arthritis, psoriatic arthritis, and ankylosing spondylitis, has recommended dosing of 50 mg once monthly. The objective of this study was to describe the biologic experience and dosing for patients using golimumab in the managed care setting. **METHODS:** The IMS LifeLink™ Health Plan database (~100 managed care plans) was utilized to identify patients aged ≥18 years at index and having an index golimumab pharmacy claim started between 4/24/2009 (product approval) and 10/31/2009. Patients were required to have 24 months pre- and ≥ 2 months post-index continuous enrollment with ≥1 RA, PsA, or AS ICD-9 diagnosis code. Biologic experience was assessed for the pre-index period. Dosing was assessed through end of data or loss of enrollment. **RESULTS:** A total of 282 patients receiving golimumab were identified; 72% were female; mean age was 52 years. The majority (73%) of patients had pre-index biologic experience. Among the biologic-experienced, 60% received 1 unique biologic, 33% received 2 unique biologics, and 7% received 3+ unique biologics before golimumab. Golimumab patients had experience with various combinations of abatacept, adalimumab, certolizumab, etanercept, and infliximab. Adalimumab alone and etanercept alone were most frequently used prior to golimumab. The golimumab dose at each of the first six prescription fills was 50 mg for over 97% of patients. The mean (median) days between fills spanned 29-33 (29-30) days. **CONCLUSIONS:** The majority of patients receiving golimumab were biologic-experienced. Observed dosing was consistent with prescribing recommendations. Consistency in dosing was observed over the first six prescriptions. Despite the history of biologic use, golimumab patients did not have an apparent increased dose requirement upon initiation. Further research is necessary to confirm these findings in a larger sample size over a longer duration of follow-up.

PSY67

REASONS FOR INITIATING INTRAVENOUS BIOLOGIC THERAPY AMONG PATIENTS WITH IMMUNOLOGY CONDITIONS: SUBSET ANALYSIS OF PRIOR SUBCUTANEOUS INJECTION (SQ) USERS AND IMPLICATIONS FOR SHARED DECISION MAKING

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OBJECTIVES: To understand the reasons for initiating an intravenous (IV) biologic therapy among prior subcutaneous injection (SQ) users, and patient satisfaction before and after switching. **METHODS:** Semi-structured telephone interviews were

conducted with 405 immunology patients currently receiving IV biologic therapy. Patients rated their level of satisfaction with current or prior medication on a 7-point Likert scale (7=Very satisfied; 1=not at all satisfied) and reported reasons for switching from SQ therapy. **RESULTS:** More than a third (37%) of surveyed IV biologic patients previously used SQ administration. Of these patients, overall mean satisfaction with SQ was 3.8, with 32% rating the SQ experience as a 1 or 2. Current IV satisfaction ratings among prior SQ users was 6.2 (vs. 6.1 for all patients surveyed). Of prior SQ users, 26% did not self-administer their injections, most frequently due to: dislike of needles; lack of confidence in own ability to administer the injection correctly; and/or physical inability to handle the syringe. Of those who did not self-administer SQ, 39% went to a physician's office for administration. Primary reasons for switching from SQ to IV administration included lack of efficacy (81%), side effects (21%), cost (10%) and dislike of self injections (9%). **CONCLUSIONS:** In this analysis, current IV biologic users appear highly satisfied with this medication. Dissatisfied SQ users that did not self-administer may offset potential "convenience" advantages of a SQ. They also switched to IV mostly for loss of efficacy and appear to be satisfied with an IV. Given the potential for patient preference differences, there appears a need for expanded treatment choices. Involving the patient in shared decision making and providing access to both IV and SQ modes of administration may be important to optimizing patient satisfaction.

PSY68

DEFINITIONS OF ANTI-TNF DISCONTINUATION MAY IMPACT UNDERSTANDING OF REAL-WORLD UTILIZATION PATTERNS

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OBJECTIVES: To evaluate treatment patterns when different definitions of discontinuation are used. Anti-tumor necrosis factor therapies including adalimumab (ADA), etanercept (ETA) and infliximab (IFX) are used to treat rheumatoid arthritis (RA). Examining discontinuation rates can help understanding of real-world treatment patterns. Different definitions of discontinuation rates have been reported elsewhere. **METHODS:** Data between 01/2005-06/2006 were extracted from the i3Innovus database. Inclusion criteria were aged ≥18, ≥1 claim for RA, and no evidence of pre-index biologic use in the six months prior. Patients were followed for 24 months. Discontinuation was defined as a gap in therapy ≥60 or ≥365 days following the last days supply. **RESULTS:** Total of 1,780 patients were analyzed: ADA= 601 (33.8%); ETA= 785 (44.1%); IFX = 394 (22.1%). If discontinuation was defined as a gap in therapy of ≥60 days, 57.2% of patients treated with ADA discontinued, 57.5% of patients treated with ETA and 37.6% of IFX patients discontinued. If discontinuation was defined as a gap in therapy of ≥365 days, 22.5% of ADA patients discontinued, 17.3% of ETA patients and 18% of IFX patients discontinued. Of those defined as 'discontinuers' after a gap of therapy of ≥60 days, 49.7 % of ADA patients, 62.1% of ETA patients and 12.8% of IFX patients restarted their index therapy on average 146.8, 146.5, and 302.4 days from the time of defined 'discontinuation'. Significantly fewer IFX patients restarted their index therapy (P<0.0001) and the time from defined discontinuation to restart was longer (p<0.0001). **CONCLUSIONS:** This analysis demonstrates that different discontinuation rates are observed when different definitions of discontinuation are employed. This may impact the understanding of real-world prescribing patterns. The data also suggests that patients treated with ADA and ETA experience lengthy gaps in therapy. Future research is needed to examine gaps in therapy on clinical and health economic outcomes.

PSY69

MODELING THE IMPACT OF REFILL OR ADMINISTRATION GAPS ON PATIENT DRUG LEVELS OF THE TNF-ALPHA INHIBITORS ETANERCEPT AND INFILIXIMAB

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OBJECTIVES: Prior etanercept drug utilization studies have reported, that among patients with a gap in observed refill time exceeding the recommended refill time, 31%-44% of patients experienced gaps greater than 2 weeks. Mean gaps (assessed at each individual refill period) ranged from 19 to 37 days. Limited comparative data exist for infliximab. The objective of this modeling analysis was to assess the impact on drug levels from gaps in prescription refill behavior that may result in under-dosing. **METHODS:** Steady state concentration models for etanercept and infliximab were developed to simulate the effect of missed dosing (i.e., gap in etanercept prescription refill or infliximab administration interval). Results were expressed as a percent of steady state trough levels (SSTL) in µg/mL, and were presented to simulate gaps that varied from 1-5 weeks. Population pharmacokinetic models for etanercept and infliximab were used to simulate out steady state concentration profiles. The parameters used in these models were extracted from recent publications. **RESULTS:** After a refill or administration gap of one week, etanercept and infliximab concentrations were at 13% and 73% of SSTL respectively. At two weeks, SSTL were 4% and 55% respectively. Etanercept levels were effectively non-existent after three weeks, whereas infliximab was at 40% of SSTL. Clinical implications were not simulated. **CONCLUSIONS:** SSTL of etanercept declines rapidly with gaps in refills and disappears with gaps as short as three weeks. Infliximab demonstrates a much more gradual decline. Poor patient refill behavior may have consequences that go beyond declining drug levels, and patient adherence risk should be an integral part of any discussion during shared treatment decision making.

PSY70

ASSOCIATION OF PROVIDER CONTINUITY WITH HOSPITALIZATION AMONG FLORIDA MEDICAID ENROLLEES WITH SICKLE CELL DISEASE (SCD)

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